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## **ABSTRACT**

A method and system for interpreting physiological data. The system includes a library of physiological data records, and a physiological data acquisition device that is coupled to the library and capable of acquiring physiological data from a patient or subject. The library may be stored on a remote server or on hardware local the acquisition device. The acquisition device includes an interpretation module to generate an interpretation of the physiological data and a correlation module to compare the interpretation to the records in the library of physiological records and determine a set of correlated data records. The system also includes an output device coupled to the acquisition device to display the interpretation and the correlated data records. Preferably, the system includes an expert location coupled to the acquisition device. The user of the system may send questions and other messages regarding the interpretation to the expert location via devices such as email, instant messaging, and chat services. An expert in the medical field relevant to the physiological data being interpreted may then respond to the messages received at the location to provide substantially real-time assistance to the user of the acquisition device.

The invention provides a method of interpreting physiological data that includes establishing a library of interpreted physiological data records, gathering the physiological data from a patient or subject, interpreting the physiological data based on a predetermined set of criteria to generate an interpretation, correlating the interpretation to one or more of the physiological data records in the library of physiological data records, and displaying the interpretation and the correlated physiological data records on a display.

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